BRAIN RESEARCH

VOL. 630 NOS. 1/2 **CONTENTS** **10 DECEMBER 1993**

Cited in Biological Abstracts (BIOSIS) – Chem. Abstracts – Index Medicus (MEDLINE) – Current Contents (Life Sci.) – Excerpta Medica (EMBASE) – Psychological Abstracts (PsycINFO) – Pascal et Francis (INIST-CNRS) – RIS (Reference Update) – Current Awareness in Biological Science (CABS)

Announcement from the Publisher v

Guideline for the Submission of Manuscripts vii

Research Reports

Radiofrequency lesions of the PVN fail to modify the effects of serotonergic drugs on food intake
P.J. Fletcher, P.J. Currie, J.W. Chambers and D.V. Coscina (Canada) 1

Effects of serotonergic drugs in experimental brain ischemia: evidence for a protective role of serotonin in cerebral ischemia
J.H.M. Prehn, M. Welsch, C. Backhauß, J. Nuglisch, F. Ausmeier, C. Karkoutly and J. Krieglstein (FRG) 10

Lactate mimics only some effects of D-glucose on epileptic depolarization and long-term synaptic failure
J.D. Stittsworth Jr. and T.H. Lanthorn (USA) 21

Regulation of the prefrontal cortical dopamine release by $GABA_A$ and $GABA_B$ receptor agonists and antagonists
M. Santiago, A. Machado and J. Cano (Spain) 28

Neurotoxic effect of the anti-HIV drug D-aspartate β-hydroxamate for rat primary neuronal cultures: attenuation by *N*-methyl-D-aspartate (NMDA) antagonists
B.P. Lockhart, J. Vila, F. Hamedi-Sangsari, A. Privat and J. Vignon (France) 32

The lateral hypothalamus: a primary site mediating excitatory amino acid-elicited eating
B.G. Stanley, V.L. Willett III, H.W. Donias, L.H. Ha and L.C. Spears (USA) 41

Differential alterations of ion channel binding sites in temporal and occipital regions of the cerebral cortex in Alzheimer's disease
M. Ikeda, D. Dewar and J. McCulloch (UK) 50

Effect of M1- and M2-muscarinic drugs on striatal dopamine release and metabolism: an in vivo microdialysis study comparing normal and 6-hydroxydopamine-lesioned rats
N. De Klippel, S. Sarre, G. Ebinger and Y. Michotte (Belgium) 57

Different subsets of CNS neurons express different glycosaminoglycan epitopes on large perineuronal proteoglycans
S.-i. Sano, J. Kudo and S.C. Fujita (Japan) 65

Autoradiographic distribution of binding sites for the non-NMDA receptor antagonist [^{3}H]CNQX in human motor cortex, brainstem and spinal cord
R.M. Chinnery, P.J. Shaw, P.G. Ince and M. Johnson (UK) 75

Effects of exposure to an estrous female on forebrain monoaminergic neurotransmission in the non-copulating male rat
J. Vega-Matuszczyk, V. Hillegaart, K. Larsson and S. Ahlenius (Sweden) 82

Effect of changes in rate of vascular perfusion on release of substances into the effluent from the brain of the rabbit
F.R. Domer, B. Alexander, P. Milner, P. Bodin and G. Burnstock (UK) 88

Glucagon injected in the lateral hypothalamus stimulates sympathetic activity and suppresses monoamine metabolism
H. Shimizu, M. Egawa, H. Yoshimatsu and G.A. Bray (USA) 95

In vivo and in vitro responses of neurons in the ventrolateral medulla to hypoxia
P.C. Nolan and T.G. Waldrop (USA) 101

Distribution of retrogradely transported fluorescent latex microspheres in rat lumbosacral ventral root axons following peripheral crush injury: a light and electron microscopic study
H.G. Persson and K.P. Gatzinsky (Sweden) 115

Spontaneous synaptic activities in rat nucleus tractus solitarius neurons in vitro: evidence for re-excitatory processing
G. Fortin and J. Champagnat (France) 125

Surface determinants of neuronal survival and growth on self-assembled monolayers in culture
D.A. Stenger, C.J. Pike, J.J. Hickman and C.W. Cotman (USA) 136

Long-term fluoxetine, but not desipramine, inhibits the ACTH and oxytocin responses to the 5-HT_{1A} agonist, 8-OH-DPAT, in male rats
Q. Li, A.D. Levy, T.M. Cabrera, M.S. Brownfield, G. Battaglia and L.D. Van de Kar (USA) 148

Response to cyanide of two types of glomoid cells in mature rat carotid body
D.F. Donnelly (USA) 157

A selective lesion of striatonigral neurons decreases presynaptic binding of [^{3}H]hemicholinium-3 to striatal interneurons
M.B. Harrison, R.C. Roberts and R.G. Wiley (USA) 169

(contents continued on p. 360)

0006-8993(19931210)630:1/2;1-2

(contents continued)

Lateralized changes in prefrontal cortical dopamine activity induced by controllable and uncontrollable stress in the rat
J.N. Carlson, L.W. Fitzgerald, R.W. Keller Jr. and S.D. Glick (USA) 178
Evidence for GABAergic projections from the tegmental nuclei of Gudden to the mammillary body in the rat
D. Wirtshafter and T.R. Stratford (USA) 188
Recovery of choline acetyltransferase activity without sprouting of the residual acetylcholine innervation in adult rat cerebral cortex after lesion of the nucleus basalis
P. Cossette, D. Umbriaco, N. Zamar, E. Hamel and L. Descarries (Canada) 195
Activation of α-adrenoceptors indirectly facilitates sodium pumping in frog motoneurons
S.B. Shope, J.C. Hackman, A.M. Holohean and R.A. Davidoff (USA) 207
Diminished effect of inhibition of nitric oxide synthase on regional cerebral vascular resistance in conscious and in isoflurane anesthetized rats during hemorrhage
O.Z. Chi, H.M. Wei, A.K. Sinha and H.R. Weiss (USA) 214
Further evidence that a mouse Chromosome 4 locus influences cerebellar folial pattern
J.D. Garretson and P.E. Neumann (USA) 221
Dopaminergic neuron B20 generates rhythmic neuronal activity in the feeding motor circuitry of *Aplysia*
T. Teyke, S.C. Rosen, K.R. Weiss and I. Kupfermann (USA) 226
Somatostatin and the paraventricular hypothalamus: modulation of energy balance
D.M. Atrens and J.A. Menéndez (Australia) 238
Glucagon and the paraventricular hypothalamus: modulation of energy balance
D.M. Atrens and J.A. Menéndez (Australia) 245
Responses of rat nucleus submedius neurons to enkephalins applied with micropressure
J.A. Coffield and V. Miletic (USA) 252
Regulation of the hypothalamic pituitary adrenal axis during chronic stress: responses to repeated intraperitoneal hypertonic saline injection
A. Kiss and G. Aguilera (USA) 262
Quantitative autoradiography of α_1- and α_2-adrenergic receptors in the cerebral cortex of controls and suicide victims
V. Arango, P. Ernsberger, A.F. Sved and J.J. Mann (USA) 271
Ongoing activity in neuroma afferents bearing retrograde sprouts
R. Amir and M. Devor (Israel) 283
Upregulation of calpain activity in neonatal rat brain after hypoxic-ischemia
K. Ostwald, H. Hagberg, P. Andiné and J.-O. Karlsson (Sweden) 289
Production and characterization of polyclonal and monoclonal antibodies to the zeta (ζ) opioid receptor
I.S. Zagon and P.J. McLaughlin (USA) 295
Binaural vs. monaural auditory evoked potentials in rat neocortex
S. Di and D.S. Barth (USA) 303
Permanent increase of the GAD_{67}/synaptophysin ratio in rat cerebral cortex nerve endings as a result of hypoxic ischemic encephalopathy sustained in early postnatal life: a confocal laser scanning microscopic study
H.J. Romijn, J. Van Marle and A.W.J.W. Janszen (Netherlands) 315

Short Communications

The effects of selective blockade of delta and mu opiate receptors on ethanol consumption by C57BL/6 mice in a restricted access paradigm
A.D. Lê, C.X. Poulos, B. Quan and S. Chow (Canada) 330
Central nervous system lesion triggers inappropriate pathway choice in adult vertebrate system
A.P. Bentley and S.J. Zottoli (USA) 333
Release of choline from rat brain under hypoxia: contribution from phospholipase A_2 but not from phospholipase D
J. Klein, T. Holler, E. Cappel, A. Köppen and K. Löffelholz (Germany) 337
Apamin increases NMDA-induced burst-firing of rat mesencephalic dopamine neurons
V. Seutin, S.W. Johnson and R.A. North (USA) 341
Neural nets identify sensory receptors from somal spikes
R.D. Rose and W.J. Karnavas (USA) 345
Evidence that L-type calcium channels do not contribute to static vestibular function in the guinea pig vestibular nucleus
A.J. Sansom, P.F. Smith and C.L. Darlington (New Zealand) 349
Effect of ceruletide on epileptogenesis in amygdaloid kindled rats
Y. Yamamoto, T. Itano, O. Miyamoto, M. Tokuda, H. Matsui, N.A. Janjua, H. Suwaki, Y. Okada, T. Negi, T.H. Murakami and O. Hatase (Japan) 353

Author Index 357